



Department of Energy
Carlsbad Field Office
P.O. Box 3090
Carlsbad, New Mexico 88221

JUL 24 2008

Mr. Farok Sharif
General Manager
Washington TRU Solutions
P.O. Box 2098
Carlsbad, NM 88221-2098

Re: DOE Approval of NS-RP-2008-04, the Justification for Continued Operations
During Repair of the Washington TRU Solutions Fire Suppression System

Dear Mr. Sharif:

Washington TRU Solutions (WTS) plans to restore the Waste Handling Building (WHB) Fire Suppression System (FSS) at the Waste Isolation Pilot Plant (WIPP) in accordance with a Justification for Continued Operation (JCO), NS-RP-2008-04, *Temporary Change to Technical Safety Requirements During Repair of the Washington TRU Solutions Fire Suppression System*. The WHB's FSS was declared inoperable on April 23, 2008 due to the loss of the main water supply to the FSS sprinkler system riser servicing the Contact Handled (CH) Bay. Actions have been completed under prior approved Response Plan NS-RP-2008-01, *Restoration of Fire Suppression Safety Function to Support Waste Emplacement*, and NS-RP-2008-02, *Basis to Continue Normal Operations During Repair of the Washington TRU Solutions Fire Suppression System*, that included: (1) the determination of the cause of the failure; (2) the provision of a repair which resulted in both a normal and an alternate water supply being made available to the riser; (3) the FSS being returned to service; (4) resumption of safe TRU waste processing, handling, and emplacement operations; and, (5) installation of the prior DOE approved FSS modifications inside the WHB Bay.

The memorandum dated July 22, 2008 indicating the DOE's approval of NS-RP-2008-004 and the signed Safety Evaluation Report (SER) are enclosed for your use. The SER provides the basis for DOE's approval of NS-RP-2008-04, which temporarily amends the facility safety basis to permit WTS to safely execute the final work to repair the WIPP FSS. NS-RP-2008-04 and two supplemental figures are provided with this letter as attachments to the SER.

The SER summarizes the CBFO reviewers' assessment of NS-RP-2008-04 and of the final FSS restoration work. The CBFO reviewers concluded that: (1) the hazard and accident analysis adequately identifies, characterizes, and bounds the controls necessary to minimize the hazards associated with continuing waste handling activities, and (2) the associated temporary deviation from the CH and RH TSR LCO 3.1.1 and SAC 5.6.4.j are necessary and appropriate to control the work. The CBFO concludes

JUL 24 2008

that worker safety is satisfactorily addressed by NS-RP-2008-04 and that risk to the public and the environment are bounded by the current safety basis documents.

The DOE approval of the NS-RP-2008-04 will terminate either (1) when the WHB fire water supply has been modified and tied into the final configuration, the integrated system has been satisfactorily tested and the WHB FSS and water supply valves are configured for routine operation, or (2) 90 days from its approval date, July 22, 2008.

If you have any questions regarding this matter, please contact Dr. Gary Scott at (575) 234-7336.

Sincerely,



David C. Moody
Manager

Enclosures

cc: w/ enc.

V. Daub, CBFO	*ED
G. Scott, CBFO	ED
D. Galbraith, CBFO	ED
G. Basabilvazo, CBFO	ED
R. Farrell, CBFO	ED
E. Preciado, CBFO	ED
P. Yocum, WTS	ED
D. Steffen, WTS	ED
D. Busche, WTS	ED
J. McCormick, WTS	ED
R. Chavez, WRES	ED
CBFO M&RC	

*ED denotes electronic distribution

United States Government

Department of Energy

memorandum

DATE: JUL 22 2008

REPLY TO
ATTN OF: EM-60 (Chung, 202-586-5151)

SUBJECT: Request for Approval of NS-RP-2008-04, the Justification for Continued Operations During Repair of the Washington TRU Solutions Fire Suppression System

TO: David Moody, Manager, Carlsbad Field Office

Based on my review of the *Safety Evaluation Report of the Waste Isolation Pilot Plant Justification for Continued Operations Temporary Change to Technical Safety Requirements during Repair of the Washington TRU Solutions Fire Suppression System (NS-RP-2008-04)*, and the *Justification for Continued Operations Temporary Change to Technical Safety Requirements During Repair of the Washington TRU Solutions Fire Suppression System, NS-RP-2008-04*, I am approving the SER. This approval will terminate either, when the WHB fire water supply has been modified and tied into the final configuration, the integrated system has been satisfactorily tested, and the WHB FSS and water supply valves are configured for routine operation, or 90 days from the date of this approval.

The hazard and accident analysis adequately identifies, characterizes, and bounds the controls necessary to minimize the hazards associated with continuing waste disposal activities and the associated temporary deviation from the CH and RH TSR LCO 3.1.1 and SAC 5.6.4.j are necessary and appropriate to control the work. Worker safety is satisfactorily addressed by NS-RP-2008-04 and risk to the public and the environment is bounded by the current safety basis documents.

I have signed the attached SER for your records and transmittal to the contractor. If you have any further questions, please call me at (202) 586-5151.



Das Y. Chung
Deputy Assistant Secretary for
Safety Management and Operations
Environmental Management

Attachment

AUTHORITY APPROVAL

**Safety Evaluation Report
of the Waste Isolation Pilot Plant
Justification for Continued Operations
Temporary Change to Technical Safety Requirements During Repair of the
Washington TRU Solutions Fire Suppression System (NS-RP-2008-04)**

**U. S. Department of Energy
Carlsbad Field Office**

Date: July 2008

SIGNATURE ON FILE

Richard Farrell, CBFO Nuclear Safety Specialist

Date: July 17, 2008

SIGNATURE ON FILE

Dr. Gary Scott, CBFO AB Senior Technical Advisor

Date: July 17, 2008

SIGNATURE ON FILE

Dr. David C. Moody, CBFO Manager

Date: July 17, 2008

Approved: 

Dac Y. Chung, Deputy Assistant Secretary,
Safety Management and Operations,
Office of Environmental Management

Date: 7/22/08

AUTHORITY APPROVAL

**Safety Evaluation Report
of the Waste Isolation Pilot Plant
Justification for Continued Operations
Temporary Change to Technical Safety Requirements During Repair of the
Washington TRU Solutions Fire Suppression System (NS-RP-2008-04)**

**U. S. Department of Energy
Carlsbad Field Office**

Date: July 2008

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Richard Farrell, CBFO Nuclear Safety Specialist

Date: July 17, 2008

SIGNATURE ON FILE

Dr. Gary Scott, CBFO AB Senior Technical Advisor

Date: July 17, 2008

SIGNATURE ON FILE

Dr. David C. Moody, CBFO Manager

Date: July 17, 2008

Approved: _____

Dae Y. Chung, Deputy Assistant Secretary,
Safety Management and Operations,
Office of Environmental Management

Date: _____

1.0 INTRODUCTION AND BACKGROUND

This Safety Evaluation Report (SER) addresses the Washington TRU Solutions (WTS) planned restoration of the Waste Handling Building (WHB) Fire Suppression System (FSS) at the Waste Isolation Pilot Plant (WIPP) in accordance with a Justification for Continued Operation (JCO) NS-RP-2008-04, *Temporary Change to Technical Safety Requirements During Repair of the Washington TRU Solutions Fire Suppression System* (Attachment 1). The WHB's FSS was declared inoperable on April 23, 2008 due to the loss of the main water supply to the FSS sprinkler system riser servicing the Contact Handled (CH) Bay. Actions have been completed under prior approved Response Plan NS-RP-2008-01, *Restoration of Fire Suppression Safety Function to Support Waste Emplacement*, and NS-RP-2008-02, *Basis to Continue Normal Operations During Repair of the Washington TRU Solutions Fire Suppression System*, that included: (1) the determination of the cause of the failure, (2) the provision of a repair which resulted in both a normal and an alternate water supply being made available to the riser, (3) the FSS being returned to service, (4) resumption of safe TRU waste processing, handling and emplacement operations, and (5) installation of the prior DOE approved FSS modifications inside the WHB Bay.

Final work activities are underway to repair a failed water supply line which connected the main loop to the WHB. These activities include the cutting and removal of concrete next to the WHB, removal and replacement of the existing pipe and valves, ground preparation to prepare for new thrust block, tie-in, and post-installation testing. This WTS submittal NS-RP-2008-04 requests DOE approval of a temporary modification to provide an alternate means for fire water supply during final installation and testing activities associated with repairing a failed fire water supply line. In addition, this JCO requests approval of amendment to the WTS safety basis documents that would allow continued operations during the final construction, installation and testing of the FSS repair of underground piping.

This SER documents the DOE review and approval of the JCO NS-RP-2008-04 and allows for this work to be done using a temporary modification for an alternate water supply and the temporarily amending of the facility safety basis by granting relief from two requirements from DOE/WIPP-95-2125, Revision 10, November 2006, *WASTE ISOLATION PILOT PLANT CONTACT HANDLED (CH) TECHNICAL SAFETY REQUIREMENTS* and the two like requirements in DOE/WIPP-06-3178, Revision 0, March 2006, *WASTE ISOLATION PILOT PLANT REMOTE HANDLED (RH) TECHNICAL SAFETY REQUIREMENTS*, while imposing additional interim controls and restrictions to cover the final tie-in and testing activities and allowing for final restoration of the FSS.

Specific relief was requested by WTS and reviewed by DOE for the following CH and RH Technical Safety Requirements (TSRs):

- CH and RH Specific Administrative Control (SAC) 5.6.4, *Waste Handling Restrictions* until repair/rework for the WHB FSS and the affected soils, gravel and pavement in the Property Protection Area (PPA) external to the WHB have also been repaired and reworked.

- CH LIMITING CONDITION FOR OPERATIONS (LCO) 3.1.1, *Fire Suppression System for the Waste Handling Building and Support Building* and RH LCO 3.1.1, *Fire Suppression System for the Waste Handling Building* defining the lowest functional requirements for the main isolation valves at each riser identified in Table 3.1.1-1, system isolation valves identified in Table 3.1.1-2, and Post Indicator Valves (PIV) identified in Table 3.1.1-1, and corresponding TSR surveillance requirements.

The requested temporary relief allows for the tie-in and testing using the repaired main and alternate water supply and a revised and a much more inclusive valve listing in the LCO tables already approved by DOE on June 23, 2008 (see SER for Page Changes 2008-002).

DOE review and approval of JCO NS-RP-2008-04 will temporarily amend the facility safety basis to allow WTS to continue normal waste handling activities during the final tie-in and post-installation testing of the FSS, under the specified interim JCO controls and other applicable CH and RH TSRs.

2.0 REVIEW PROCESS

Incorporation of these changes was considered by the Approval Authority based upon review of the specific changes and their supporting documentation by the CBFO staff, with assistance from the CBFO Technical Assistance Contractor (CTAC). Since this JCO NS-RP-2008-04 is for the final phase of the FSS restoration as initially evaluated in the previous JCO NS-RP-2008-02 and Response Plan NS-RP-2008-01, the review involved (1) verification of the technical accuracy, completeness, and defensibility of the proposed additions and revisions of the fire water distribution and fire suppression systems, (2) verifying that the interim TSR changes are consistent with the bases for the derivation of controls in Chapters 5 in both DOE/WIPP-95-2065, Revision 10, November 2006, *WASTE ISOLATION PILOT PLANT CONTACT HANDLED (CH) WASTE DOCUMENTED SAFETY ANALYSIS* and DOE/WIPP-06-3174, Revision 0, March 2006, *WASTE ISOLATION PILOT PLANT REMOTE HANDLED (RH) WASTE DOCUMENTED SAFETY ANALYSIS*, (3) verifying all listed valves, including the newly listed supply valves across the WIPP Site were locked open at the time requested by CBFO, (4) CBFO Safety System Oversight (SSO) and FR personnel walking down the current WHB FSS configuration, and (5) verifying test results from the last set of NFPA code-complaint testing of the internal components and piping installed which demonstrated the FSS is ready for final tie-in and integrated system testing.

This SER is prepared in accordance with the guidance provided in DOE-STD-1104-96, *Review and Approval of Nonreactor Nuclear Facility Safety Analysis Reports* (Change Notice 3). This review provides the Deputy Assistant Secretary, Safety Management and Operations, DOE Office of Environmental Management (Approval Authority), with the basis for approval of these changes.

3.0 SCOPE OF OPERATIONS AUTHORIZED BY THE JCO

NS-RP-2008-04 requests approval of amendment to the WTS safety basis documents that would allow continued operations during the final construction, installation and testing of the FSS repair of underground piping. Final work activities are underway to repair a failed water supply line which connected the main loop to the WHB. These activities include the cutting and removal of concrete next to the WHB, removal and replacement of the existing pipe and valves, ground preparation to prepare for installing a new thrust block, tie-in, and post-installation testing. The final configuration of the reconfigured portion of the WHB FSS is depicted in the two attached Figures, Figure 1, "New PIV and Fire Water Line Repair", and Figure 2, "New CH Bay Sprinkler System Riser Connection Resulting From Yard Piping Installation".

NS-RP-2008-04 requests DOE approval of a temporary modification to provide an alternate means for fire water supply during final installation and testing activities associated with repairing a failed fire water supply line. During installation and testing, a temporary modification is required to provide the credited safety function for fire suppression by using temporary hoses to connect fire hydrant number 10 to the WHB. The temporary modification will only be used during the valve and fitting replacement, tie-in, and testing activities. This temporary modification is required to provide the credited fire suppression safety function while waste is being processed and disposed.

In addition, NS-RP-2008-04 requests specific relief from the following TSRs that cannot be implemented during the final installation, tie-in and testing activities:

1. SAC 5.6.4, *Waste Handling Restrictions*, Item J requires that barricades shall be installed along the southwest wall of the WHB between airlock 100 and the TRUPACT Maintenance Facility (TMF) with the barriers being 10 feet from the external wall thus preventing vehicles from potentially breaching the WHB wall and impacting CH WASTE stored in the southwest corner of the CH Bay.

As was previously approved, specific barriers have been removed during the controlled repair activities. All access to the work area including near the working excavated hole allowing for the repairs is controlled.

The excavated hole will limit vehicle access and prevent vehicles and equipment from breaching the WHB exterior wall where the barriers were removed until such time as the soils and pavement can be brought back up to grade and the previously removed barriers be replaced.

2. CH and RH LCO 3.1.1 defining the lowest functional requirements for the main isolation valves at each riser as identified in Table 3.1.1-2 and the PIVs as identified in Table 3.1.1-1 will not be met during the final tie-in portion of the final installation and subsequent testing activities.

The requested CH and RH TSR relief has been reviewed, is consistent with those interim controls and restrictions already used in prior portions of the series of investigation and repair

processes, and allows for the final tie-in and code compliant testing of the repaired/reworked WHB FSS.

No other new text or valve related control functions are proposed to be added to any CH or RH TSR sections. Since WTS had already revised the LCO 3.1.1, corresponding Surveillance Requirements (SR) and surveillance procedures to implement the previously approved page changes (see Page Changes 2008-002), all TSR-required valves will be procedurally controlled.

4.0 EVALUATION OF RISK

The DOE review team concurs with NS-RP-2008-04 Section 7.0 and 8.0 evaluations that there is no increase in fire risk than previously evaluated in the CH Documented Safety Analysis (DOE/WIPP-95-2065, Revision 10, November 2006), and that there is no reduction in the margin of safety. The temporary modifications will provide the credited FSS safety function during the final tie-in and post-installation testing. Implementation of the JCO interim controls and restrictions as discussed in Section 5.0 of this SER, and other applicable CH and RH TSRs, are adequate to ensure that the risks are acceptable to DOE. The interim controls and restrictions will provide a disciplined approach to implement the temporary modification and complete the required repair, and failure to implement the controls would constitute a violation of the TSRs.

5.0 EVALUATION OF INTERIM CONTROLS

Section 6.0 of NS-RP-2008-04 provides the interim controls and restrictions that will be imposed during the final tie-in and post-installation testing activities. When approved by DOE, the following interim controls and restrictions will be imposed during the rework and repair activities and will supplement the CH and RH safety basis and constitute interim SACs to ensure safe operations while NS-RP-2008-04 remains in effect. Any failure to comply with these interim SACs and will be treated as a TSR violation in accordance with approved TSR implementation processes.

1. All temporary and permanent changes associated with the repair and temporary modification will be documented and controlled as an engineering change order (ECO).
2. Work performed to repair and test the temporary modification will be controlled via approved engineering change document and work control packages that have been developed with established work control processes, incorporating the necessary reviews. In addition, to established procedures, all documents prepared will be reviewed and approved by the WTS fire protection engineer.
3. All implementing work instructions will be processed in accordance with the unreviewed safety question process.
4. Change packages (which include the ECOs and work orders containing field work instructions) will be walked down by the cognizant engineer, CBFO safety system oversight (SSO) personnel, the facility representative (FR) prior to release for work. The walk down will be documented.

5. Waste receipt and emplacement will be conducted in accordance with established procedures and all TSRs including those specifically modified by the JCO.
6. Access to the work area external to the WHB will be controlled by WTS personnel. Vehicle access to the area will be limited to those vehicles and equipment required for the investigation, repair, testing and final system alignment activities.
7. When flammable liquid or combustible liquids (vehicle and equipment) in the work area external to the WHB are within 10 feet of the south wall of the TRUPACT Maintenance Facility (TMF), CH Waste in the WHB CH Bay SHALL BE ≥ 12 feet from the south wall.
8. A roving fire watch will be established in affected area(s) when the temporary modification is used to supply the fire water to the WHB. Pressure gauge FW-411-PI-006 will be verified each shift to be ≥ 125 psig.
9. Transient combustibles will not be staged or stored within 10 feet of the south wall of the TMF.

DOE and WTS held a focused FSS modification scope, schedule, status and "FSS as configured" meeting in Carlsbad that covered the originally proposed interim controls and restrictions. Based on DOE discussion and recommendation by the DOE Facility Representative (FR), the requirement for the roving fire watch was added to a previously provided set of WTS proposed interim controls and restrictions. In addition, design features and DSA supporting considerations such as freeze protection, current WHB structural support and configuration applicable to the final tie-in and testing, prevention of soils and trash entering the system during completed and the remaining repair/rework, and testing activities were review with DOE CBFO. The WTS review was deemed to be complete and to have properly addressed CBFO's questions on the considerations mentioned above.

DOE FPE, SSO, FR and Safety Basis personnel considered these interim controls and judged them to be appropriate during the duration of NS-RP-2008-04 and to effectively supplement compliance with the remainder of the CH and RH TSRs (e.g., combustible loading, hot work control, etc.). The implementation of these TSR changes with the addition of the roving watch are appropriate for the contractor to operate for the time necessary to perform the final tie-in and testing of the WHB FSS as established by the safety basis. No restrictions of normal operations are deemed necessary. The unreviewed safety question determination process will assure that maintenance and construction activities that involve hot work during the duration of the JCO are appropriately review and approved.

6.0 CONCLUSIONS

Based on the DOE reviewers' assessment of NS-RP-2008-04, and the evaluation of the Approval Authority, it is concluded that: (1) the hazard and accident analysis adequately identifies,

characterizes, and bounds the controls necessary to minimize the hazards associated with continuing waste handling activities, and (2) the associated temporary deviation from the CH and RH TSR LCO 3.1.1 and SAC 5.6.4.j are necessary and appropriate to control the work. DOE concludes that worker safety is satisfactorily addressed by NS-RP-2008-04 and that risk to the public and the environment are bounded by the current safety basis documents. WTS will use established work control processes and reviews to assure required radiological controls, industrial safety, nuclear safety, and regulatory compliance are maintained during implementation of NS-RP-2008-04. The CBFO will provide required oversight during the duration of NS-RP-2008-04.

The DOE approval of the NS-RP-2008-04 will terminate when the WHB fire water supply has been modified and tied into the final configuration, the integrated system has been satisfactorily tested and the WHB FSS and water supply valves are configured for routine operation.

Safety Evaluation Report Attachments

Attachment 1 – NS-RP-2008

Figure 1 – New PIV and Fire Water Line Repair

**Figure 2 – New CH Bay Sprinkler System Riser Connection Resulting From
Yard Piping Installation**

Justification for Continued Operations
Temporary Change to Technical Safety Requirements During Repair
of the Washington TRU Solutions Fire Suppression System

1.0 Introduction

The Waste Handling Building (WHB) fire suppression system (FSS) was declared inoperable on April 23, 2008. The facility prepared and submitted a response plan (NS-RP-2008-01, *Response Plan – Restoration of Fire Suppression Safety Function to Support Waste Emplacement*) to govern safe waste handling and emplacement of waste into the disposal facility. After approval of the response plan by the U.S. Department of Energy (DOE), all waste has been received, processed and emplaced consistent with the specified requirements and interim controls.

WTS prepared two justifications for continued operations (JCOs) to govern the installation of facility modifications while the fire suppression system was being returned to operable status. A facility modification has been implemented to provide an alternate fire water distribution system to provide the credited safety function. The fire suppression system and the fire water distribution system have been returned to operable status. In addition, limiting conditions for operation (LCOs) 3.1.1, *Fire Suppression System for the Waste Handling Building*, and LCO 3.1.2 *Fire Water Distribution System*, have been modified, approved by DOE, and implemented.

Final work activities are underway to repair a failed water supply line which connected the main loop to the WHB. These activities include the cutting/removal of concrete next to the WHB, removal/replacement of the existing pipe and valves, ground preparation, tie-in and testing.

2.0 Scope

This JCO requests DOE approval of a temporary modification to provide an alternate means for fire water supply during final installation and testing activities associated with repairing a failed fire water supply line. In addition, this JCO requests approval of amendment to the WTS safety basis documents that would allow continued operations during the final construction, installation and testing of the FSS repair of underground piping.

Justification for Continued Operations

Temporary Change to Technical Safety Requirements During Repair of the Washington TRU Solutions Fire Suppression System

The JCO specifies the interim restrictions and controls required to provide safe operation during the repair/rework of the FSS. Specific relief is needed from the following CH and RH TSRs:

- SAC 5.6.4, *Waste Handling Restrictions*, until repair/rework activities have been completed for the FSS and the property protection area external to the WHB affected by repair/rework; and
- CH and RH LCO 3.1.1 lowest functional requirements for the main isolation valves at each riser identified in Table 3.1.1-1, system isolation valves identified in Table 3.1.1-2, and PIVs identified in Table 3.1.1-1, and corresponding TSR surveillance requirements.

This JCO ensures protection of the workers, the public, and the environment for continued operations by implementing an alternate means to provide the credited safety function while the FSS is being repaired/reworked.

3.0 Regulatory Basis

This JCO has been prepared consistent with the requirements and guidance of DOE G 424.1-1A, *Implementation Guide for Use in Addressing Unreviewed Safety Question Requirements*. Section 2.4 of the Guide provides an alternative to ceasing operations when an unplanned condition arises that would otherwise require shutting down the facility.

4.0 Facility Modifications to Restore Fire Suppression

A facility modification has been implemented to provide adequate water supply to the automatic sprinkler system serving the CH Bay (Building 411 room 103) through an existing fire water supply in the Overpack and Repair room (Building 411 room 108) of the Waste Handling Building (Building 411). This facility modification has returned the fire suppression system and the fire water distribution system to operable status.

Longer term repair activities to repair/replace the fire water supply line and associated isolation valves exterior to the WHB are ongoing. These activities include ground preparation, construction, and installation, tie-in, and testing activities. During installation and testing, a temporary modification is required to provide the credited safety function for fire suppression by using temporary hoses to connect fire hydrant number 10 to the WHB. This fire hydrant is not near the construction areas and the fire hose will be run in a culvert to ensure that heavy equipment does not damage or interfere with the hoses for the limited duration of the installation and testing.

Justification for Continued Operations
Temporary Change to Technical Safety Requirements During Repair
of the Washington TRU Solutions Fire Suppression System

The temporary modification will only be used during the valve and fitting replacement, tie-in, and testing activities on the main fire loop. This temporary modification is required to provide the credited fire suppression safety function while waste is being processed and disposed.

5.0 Temporary Changes to WTS TSRs

The following TSR cannot be implemented during the final installation, tie-in and testing activities.

1. SAC 5.6.4, *Waste Handling Restrictions* item J requires that barricades shall be installed along the southwest wall of the WHB between airlock 100 and the TMF such that they are nominally 10 ft from the external wall of the WHB. The basis for the control is to prevent vehicles from breaching the WHB wall and impacting CH WASTE stored in the SW corner of the CH BAY

Barricades must be removed during the repair activities. Access to the area is controlled.

The hole exposing the underground piping and repair equipment will prevent vehicles from breaching the WHB.

2. CH and RH limiting conditions for operation (LCO) 3.1.1 lowest functional requirements for the main isolation valves at each riser identified in Table 3.1.1-1, system isolation valves identified in Table 3.1.1-2, and PIVs identified in Table 3.1.1-1 will not be met during final installation and testing.

6.0 Interim Controls and Restrictions

This section provides the interim controls and restrictions that will be imposed during repair/rework activities. Upon DOE approval of this JCO, it will supplement the CH and RH safety basis document. The interim controls below constitute interim directed SACs to ensure safe operation while the JCO is in effect. Failure to comply with an interim SAC will be processed in accordance with established TSRs for TSR violations.

1. All temporary and permanent changes associated with the repair and temporary modification will be documented and controlled as an engineering change order (ECO).

Justification for Continued Operations
Temporary Change to Technical Safety Requirements During Repair
of the Washington TRU Solutions Fire Suppression System

2. Work performed to repair and test the temporary modification will be controlled via approved engineering change document and work packages that have been developed with the established work control processes, incorporating the necessary reviews. In addition to established procedures, all documents prepared will be reviewed and approved by the WTS fire protection engineer.
3. All implementing work instructions will be processed in accordance with the unreviewed safety question process.
4. Change packages (which include the ECOs and work orders containing field work instructions) will be walked down by the cognizant engineer, CBFO safety system oversight (SSO) personnel, and the facility representative (FR) prior to release for work. The walk down will be documented.
5. Waste receipt and emplacement will be conducted in accordance with established procedures and all TSRs including those specifically modified by this JCO.
6. Access to the work area external to the WHB will be controlled by WTS personnel. Vehicle access to the area will be limited to those vehicles and equipment required for the investigation and/or repair activities.
7. When flammable liquid/combustible liquids (vehicles and equipment) in the work area external to the WHB are within 10 ft of the south wall of the TRUPACT Maintenance Facility, CH WASTE in the southwest corner of the WHB SHALL be ≥ 12 feet from the south wall.
8. A roving fire watch will be established in affected area(s) when the temporary modification is used to supply the fire water to the WHB. Pressure gauge FW-411-PI-006 will be verified each shift to be ≥ 125 psig.
9. Transient combustibles will not be staged/stored within 10 ft of the south wall of the TMF.

7.0 Risks

The operations associated with the receipt and emplacement of waste do not increase the probability or consequences of accidents previously evaluated in the facility safety analyses. The events of concern from the CH DSA Chapter 3 Tables A-13 and A-14 are WHB1-1, WHB1-2, WHB 1-3, WHB 1-5, WHB 6-2, WHB 6-3, WHB 7-1, WHB 7-2, and BG 6-1. These events include fires and waste container explosions during processing of high wattage waste. Therefore, there is no increased risk over that of normal operations with the temporary modifications to the FSS and interim controls and restrictions.

Justification for Continued Operations
Temporary Change to Technical Safety Requirements During Repair
of the Washington TRU Solutions Fire Suppression System

8.0 Margin of Safety

There is no specific margin of safety identified in the CH or RH DSAs and TSRs for waste handling restrictions reliant on the barricades external to the WHB. The excavation hole and access control to the area provide the credited safety function relied upon in the TSRs (i.e., prevents vehicles from breaching the WHB wall and impacting CH WASTE stored in the SW corner of the CH BAY). Hence, there is no reduction in the margin of safety.

There is no specific margin of safety identified in either the CH or RH DSA and TSRs for waste handling activities reliant on the fire suppression system. By providing an alternate source and routing of water for the RH Bay fire suppression system, the credited safety function will be restored. The TSR control strategy is to prevent accidents that could result in a radiological release.

There are no consequences for the emplacement events greater than those already analyzed for waste disposal. Hence, there is no reduction in the margin of safety.

9.0 Description of How Existing Controls/Restrictions Maintain Safe Conditions

Implementation of the temporary modification presented above, implementing the interim restrictions and controls, and remaining TSRs are adequate to ensure that the risks are acceptable to DOE. The modifications will provide the credited FSS safety function. The interim restrictions and controls will provide a disciplined approach to implement the temporary modification and complete the required repair.

10.0 Termination of this Response Plan

This response plan will terminate when the fire water supply line and associated isolation valves have been installed and tested, and the property protected area is returned to service.

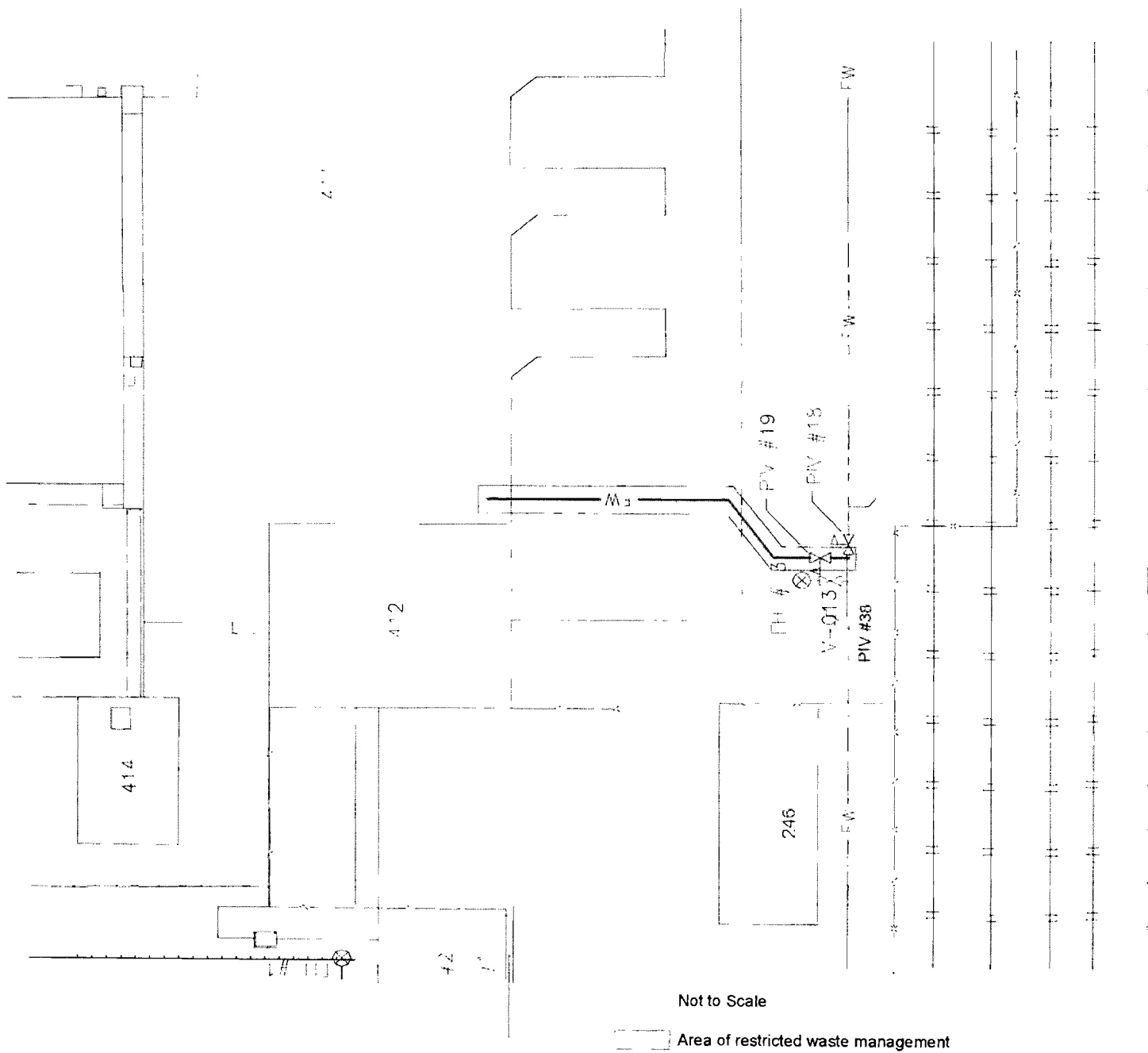
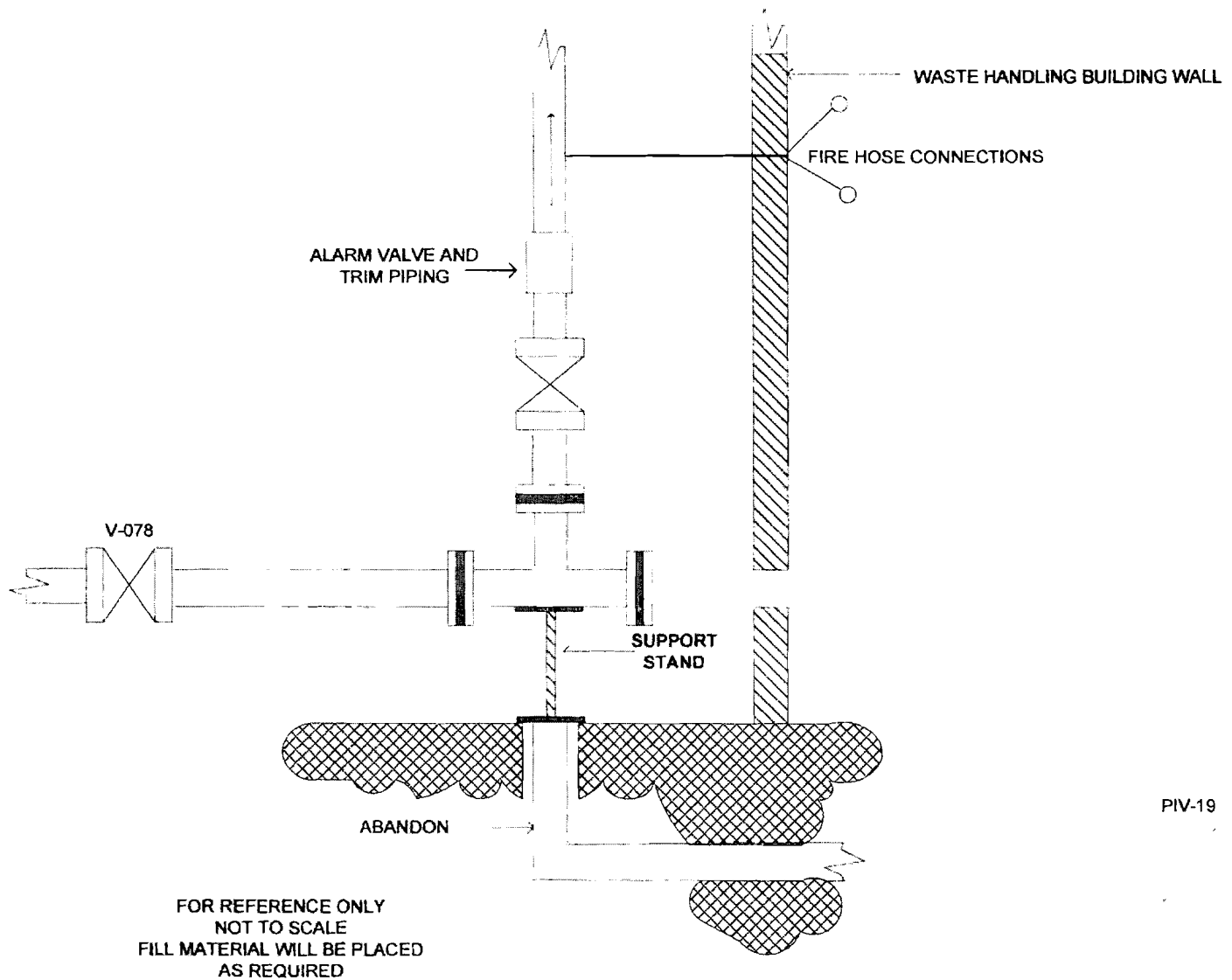


Figure 1
 New PIV and Fire Water Line Repair



PIV-19

Figure 2
New CH Bay Sprinkler System Riser Connection
Resulting From Yard Piping Installation